

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Alaska Air Carriers Association****Federal Tax ID: 23-7134047****Project Title:**

Alaska Air Carriers Association - Capstone Implementation

State Funding Requested: \$ 30,000**House District: Statewide (1-40)**

One-Time Need

Brief Project Description:

Assist implementation of capstone aviation technology for commercial and general aviation flight safety in Alaska in cooperation with a Federal Aviation Administration initiative.

Funding Plan:**Total Cost of Project: \$30,000**Funding Secured

Amount FY

Other Pending Requests

Amount FY

Anticipated Future Need

Amount FY

There is no other funding needed

Detailed Project Description and Justification:

see attached project description

Project Timeline:

FY 09 \$30,000 Marketing and Outreach for Capstone Technology Installations

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

not applicable

Grant Recipient Contact Information:

Contact Name: Karen Casanovas

Phone Number: 907-277-0071

Address: 2301 Merrill Field Dr., Suite A-3, Anchorage, Ak 99501

Email: karen@alaskaaircarriers.org

Has this project been through a public review process at the local level and is it a community priority? ☒ Yes ☐ No

ALASKA STATE LEGISLATURE

SENATOR DONALD C. OLSON



ALASKA
STATE CAPITOL
ROOM 514
JUNEAU, ALASKA 99801-1182

(907) 465-3707
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March 12, 2008

MEMORANDUM

To: Senator Stedman, Co-chair
Senator Hoffman, Co-chair
Senate Finance Committee

From: Senator Olson

Re: \$30,000 Capital Budget Appropriation for Capstone Implementation.

I would appreciate your consideration of including a \$30,000 grant to the Alaska Air Carriers Association (AACA) for their efforts to help implement the Capstone air safety program for Alaska's commercial and general aviation aircraft. AACA has been instrumental in field testing this technology for Alaskan application.

An important aspect of this program is the Federal Aviation Administration's (FAA) commitment of nearly \$500 million over the next 5 years for the ground station equipment and operation. This expenditure is contingent upon the state ensuring that Alaskan aircraft have the associated equipment installed. To this end, AACA is party to a memorandum of agreement with the FAA to help affect the installation of capstone sets in at least 4000 craft in the next several years.

The initial effort of the state to provide favorable loans (SB 149) to aircraft owners is a good first step. This grant will provide the necessary marketing and outreach to insure the programs success.

EXECUTIVE SUMMARY

Business Plan Concept to Implement Capstone Aircraft Equipage Statewide

The Alaska Air Carriers Association is requesting \$30,000 to assist with marketing and outreach for the revolving loan program.

Purpose:

The purpose of the marketing and outreach would be to implement a Safety Equipage Incentive Program (SEIP) is to achieve Capstone avionics equipage of Alaskan commercial and general aviation aircraft that cover 90% of the Alaskan flight hours (approximately 4,000 aircraft). The overall goal of the Capstone Statewide Program is to:

- Increase air travel safety for all Alaskans using air carriers, air taxi operators, and general aviation operations in Alaska.
- Improve aviation access and reliability (economic viability) of rural Alaskan communities.
- Improve search & rescue, by reducing search operations and expediting rescue actions. Currently these avionics are not affordable for most operators and nearly all operations across the state will not be part of any federal mandate to equip. Without incentives, equipage may never happen or be many years after the Lower 48 is enjoying next generation (NextGen) aviation capabilities. Alaska desperately needs to be an accelerated part of the nationwide airspace modernization plan.

Method:

The Surveillance and Broadcast Services Capstone Statewide Plan (8 August 2007) is a joint industry-FAA plan with a goal of equipping Alaskan based aircraft and installing ground infrastructure such that 90% of Alaskan air operations would be covered by the FAA NextGen aviation technologies. Doing so will expand the Capstone Program's demonstrated 47% safety improvement record across Alaska. FAA estimates a 33% reduction in fatal accidents statewide and \$824 million in combined public benefits from reduced aircraft accidents, enhanced rural area medical evacuation, and more effective search & rescue operations (over the next 27 years).

While the FAA will make an investment in this NextGen airspace system in Alaska, the funding will be limited or delayed unless Alaskan owners/operators equip at levels enabling the target of 90% of all flight hours in Alaska to be met (approximately 4,000 aircraft).

Currently, the increase in the FAA investment in Alaska is tied to the successful implementation of this program and estimated at \$493 million, much of which will be used for ground system installations over the next five years in accordance with the Statewide Plan.

Page Two
The Alaska Air Carriers Association
March 5, 2008

1. Management Plan

The Division of Investment as the AE for the revolving loan program will improve aviation safety statewide. The proposed public money and the AE will ensure this money is used in the public interest for its intended purpose. A non-profit corporation like ours, however, could perform marketing and outreach in coordination with the State of Alaska. Alaskan aviation industry organizations, including the Alaskan Aviation Safety Foundation and the Alaska Airmen's Association, fully support the AACA's coordination of marketing the loan program. Additional support will be provided by the Alaska Agreement Implementation Committee (AIC). The AACA will coordinate with the above organizations, the FAA, and the State of Alaska, Department of Transportation and Public Facilities.

2. AACA Coordination/ Marketing and Outreach

Tasks

1. Assist in coordination of financial aid program including a grants and loans that will reduce costs to aircraft operators to the level necessary for sufficient voluntary equipage as provided in the agreement with FAA for full FAA investment in Alaska.
2. Reach out to public and private sector entities that operate aircraft fleets to encourage equipage and method of participating.
3. Conduct an outreach program to educate stakeholders, public officials, and the general public on the benefits of equipage.
4. Coordinate with equipment manufactures and FAA offices concerning identification of suitable equipment configurations, installation, and training.
5. Negotiate with avionics manufactures for volume purchase discounts or other options to lower the price of equipment.
6. Coordinate with FAA, the State of Alaska, Division of Investments, aviation schools, and industry to train installers needed to handle the volume of equipment installations.
7. Facilitate program progress in terms of aircraft equipped and commitments to equip.
8. Bring together other aviation and safety organizations as appropriate.

It is anticipated this program will have initially up to 1 staff to address these program functions. Support of an avionics incentive program is necessary in order to equip 4,000 aircraft. This program will allow safety, access and basic transportation for Alaskans.



Surveillance and Broadcast Services (SBS) Statewide Capstone Project Brief

What's at Issue?

The future of the Alaskan aviation transportation system is literally at stake. Approximately \$493 million in federal funding for needed aviation infrastructure will be in jeopardy without a commitment of State support for approximately \$34.1 million over five years.

Why It's Important

The SBS Capstone Project is a joint industry and Federal Aviation Administration (FAA) effort to improve Alaska aviation safety and community access by implementing proven, cost effective safety technology. Studies by the University of Alaska show that the original Alaska Capstone Program reduced the aviation accident rate in southwest Alaska by 47% and will save the lives of more than 100 residents in this area alone over a decade! Under the second phase of Capstone, residents of Southeast Alaska are now benefiting from the commercial aircraft equipped with next generation technology allowing improved access in that challenging terrain and weather environment.

Once Capstone is implemented statewide, FAA estimates a 33% reduction in fatal accidents and \$824 million in combined public benefits from:

- Reduced aircraft accidents
- Enhanced rural community access
- Improved medical evacuation, and
- More effective search & rescue operations

Status

Capstone is now managed by the FAA Surveillance and Broadcast Services (SBS) Office in Washington DC, with a project manager for Alaska, based in Anchorage. The Alaska aviation associations and the FAA SBS office signed an agreement to effect a coordinated deployment of ground infrastructure and aircraft equipage statewide. A detailed implementation plan includes a federal investment of \$100 million over the initial five years, with a total of \$493 million in ground infrastructure for Alaska over the next 27 years. However, to receive the entire FAA investment requires that 4,000+ Alaska based aircraft install additional avionics over the initial five years to utilize the upgraded FAA infrastructure. While market forces are expected to bring avionics equipage costs into affordable ranges over the next decade, the cost of the equipment is currently not affordable for most operators. Without such equipage, some \$187 million of this FAA investment needed to complete the statewide system in Alaska will be lost.

Equipage Program

The FAA has authorized funding for new ground infrastructure, including communications, navigation, surveillance, weather reporting, and airport access



upgrades. However, all of this federal funding will only be expended if Alaska aviation operators voluntarily equip with the avionics necessary to utilize the FAA infrastructure. A joint federal-state-private sector **Safety Equipage Incentive Program (SEIP)** is planned to encourage commercial and general aviation operators to install the necessary equipment on their aircraft. This short-term program is designed to lower the cost of avionics, and to stimulate the equipage required to achieve the federal investment.

Aviation Community Position

A State of Alaska investment of \$34.1 million over five years is required to match \$493 million in federal funding authorized by the FAA, as well as \$11 million in private funding, from individual aircraft owners and operators. With this highly leveraged investment by the State of Alaska, our aviation transportation system will become an early implementation of the next generation FAA national airspace system (NextGen).

With full statewide implementation, Alaskan travelers will have access to an aviation transportation system that is on a par with the rest of the U.S. A significant number of accidents will be avoided through the capabilities of the Capstone-proven avionics safety equipage package. The system also will provide increased access and opportunities for economic development and medical emergency evacuation by increasing the number of airports served by instrument approaches and having radar-like services in areas outside of radar coverage. Plus, search & rescue costs will be reduced – virtually eliminating the search operation portion and enabling expedited rescue action through aircraft tracking capabilities.

ACTION REQUESTED

- Provide State of Alaska support for a **Safety Equipage Incentive Program** to equip approximately 4,000 aircraft: specifically a \$34.1 million grant as described above to match \$493 million in FAA federal funding as well as \$11 million in private funding.
- Provide input to the Governor and Legislature to support modernizing Alaska's most extensive transportation system.

SAFETY EQUIPAGE INCENTIVE PROGRAM (SEIP)

Business Plan Concept to Implement Capstone Aircraft Equipage Statewide

Purpose:

The purpose of the Safety Equipage Incentive Program (SEIP) is to achieve Capstone avionics equipage of Alaskan commercial and general aviation aircraft that cover 90% of the Alaskan flight hours (approximately 4000 aircraft). The overall goal of the Capstone Statewide Program is to:

- Increase air travel safety for all Alaskans using air carriers, air taxi operators, and general aviation operations in Alaska.
- Improve aviation access and reliability (economic viability) of rural Alaskan communities.
- Improve search & rescue, by reducing search operations and expediting rescue actions.

Currently these avionics are not affordable for most operators and nearly all operations across the state will not be part of any federal mandate to equip. Without incentives, equipage may never happen or be many years after the lower 48 is enjoying next generation (NextGen) aviation capabilities. Alaska desperately needs to be an accelerated part of the nationwide airspace modernization plan.

Method:

The Surveillance and Broadcast Services Capstone Statewide Plan (8 August 2007) is a joint industry-FAA plan with a goal of equipping Alaskan based aircraft and installing ground infrastructure such that 90% of Alaskan air operations would be covered by the FAA NextGen aviation technologies. Doing so will expand the Capstone Program's demonstrated 47% safety improvement record across Alaska. FAA estimates a 33% reduction in fatal accidents statewide and \$824 million in combined public benefits from reduced aircraft accidents, enhanced rural area medical evacuation, and more effective accident search & rescue operations (over the next 27 years).

While the FAA will make an investment in this NextGen airspace system in Alaska, the funding will be limited or delayed unless Alaskan owners/operators equip at levels enabling the target of 90% of all flight hours in Alaska to be met (approximately 4000 aircraft). Currently the increase in the FAA investment in Alaska is tied to the successful implementation of this program and estimated at \$493 million, much of which will be used for ground system installations over the next five years in accordance with the Statewide Plan.

Matching Federal – State – Private Sector Program:

The substantial investment by the FAA in Alaskan based aviation infrastructure is tied to equipage of Alaskan based aircraft. In other words, the federal investment of nearly one half billion dollars is contingent upon aircraft equipage. The Statewide Plan describes an equipage incentive program that requires \$11 million dollars from the private sector (owners/operators) and \$34 million from the State of Alaska. This five year plan will result in 90% of all flight operations across the state of Alaska to enjoy the safety and reliability enhancements proven by the Capstone Program.

Alaska State Budget Request

Alaska Fiscal Year	Budget
2009	\$3.0 M
2010	\$7.1 M
2011	\$8.3 M
2012	\$8.6 M
2013	\$7.1 M
Total	\$34.1M

Note: Both FY2009 and FY2010 are requested in first year (FY2009) to accommodate incompatibility of state fiscal year, federal fiscal year, and aircraft availability.

- The State's investment is necessary to meet the equipage goals required by the FAA, and thus to leverage the full \$493 million FAA investment, which will enable Alaska to reap \$824 million in safety and community access benefits over the next 27 years.

Utilizing State grant funding to accomplish this program, the following business plan would be implemented by an Administering Entity (AE) as described below.

1. Management Plan

The AE will have as part of its mission to improve aviation safety statewide. The proposed state grant is public money and the AE would ensure this money is used in the public interest for its intended purpose. It is anticipated that a 501(c)(3) non-profit corporation could perform this administering function. The Alaskan aviation industry, to include the Alaskan Aviation Safety Foundation, the Alaska Air Carriers Association, and the Alaska Airmen's Association fully supports this program. Additional support will be provided by the Alaska Agreement Implementation Committee (AIC). The AE will coordinate with the above organizations, the FAA, and the State of Alaska.

It is anticipated that a list of AE-authorized aircraft equipment installers would be established under an open qualification processes. All installation paperwork would be handled by these AE-authorized installers, who would determine if the criteria for grant assistance are met (e.g., a Permanent Fund receipt, aircraft registration in Alaska, qualified equipment, certification of eligibility, agreement with installation grant assistance assurances including requisite equipment usage training, etc.), and collect the owner's matching contribution for the equipment, either \$2,500 or \$5,000 per aircraft (depending on equipage level). Upon completion of the installation, the installer would receive SEIP payment for the balance up to the installation limits of \$12,000 or \$25,000 per aircraft (depending on equipage level). Installers would maintain records and documentation of work completed for later audit by the AE, and would submit quarterly reports to the AE.

2. AE Staffing Plan

Tasks

1. Establish a financial aid program including a grants and loans that will reduce costs to aircraft operators to the level necessary for sufficient voluntary equipage as provided in the agreement with FAA for full FAA investment in Alaska.
2. Reach out to public and private sector entities that operate aircraft fleets to encourage equipage and method of participating.
3. Conduct an outreach program to educate stakeholders, public officials, and the general public on the benefits of equipage.
4. Coordinate with equipment manufactures and FAA offices concerning identification of suitable equipment configurations, installation, and training.
5. Negotiate with avionics manufactures for volume purchase discounts or other options to lower the price of equipment.
6. Coordinate with FAA, aviation schools, and industry to train installers needed to handle the volume of equipment installations.
7. Track program progress in terms of aircraft equipped and commitments to equip.
8. Coordination with FAA, State of Alaska, and other organizations as apropos.

It is anticipated this program will have initially up to 3 staff to address the below program functions:

- 1) Program management
- 2) Financial oversight (accounting, contracts)
- 3) Outreach and public relations
- 4) Technical and training coordination

Staffing options include:

- 1) Direct hire
- 2) Contract support (grant writing, outreach, safety impact study (success measurement))
- 3) Adjunct support from FAA and/or other organizations
- 4) Shared resources from aviation associations and FAA

3. Marketing/Outreach Plan

The marketing/outreach plan will include safety benefits and overall SEIP education for:

- Equipppers (users):
 1. Association events, publications, and website
 2. Town meetings – pilots, operators, and installers
 3. FAA and State publications, seminars, and other outreach material
 4. Outreach to private entities to equip (not under program e.g., US military, Alaska Airlines)
- Passengers (customers):
 5. Passenger outreach – native community/tribes, hospitals, school district, etc.
- Broader supporters:
 6. FAA, legislature/State, congressional
 7. Press relations – newspaper, magazine, TV, radio (both aviation and non-aviation formats), media press kits

4. Financial Plan

Funding Sources:

1. State Grant for Safety equipment – \$34.1 million over 5 years (to include normal overhead for program administration, as described above)
2. Shared resources (office space, adjunct staff from FAA, possible State, other organizations)

Costs:

- Safety equipment
- Minimal Program Overhead to include:
 - Staff, Office space, Computers and other equipment, Outreach, Travel



U.S. Department
of Transportation
**Federal Aviation
Administration**

DEC 10 2007

Governor Sarah Palin
P.O. Box 110001
Juneau, AK 99811-0001

Dear Governor Palin:

This letter is concerning the Alaska Aviation Industry's plan to obtain \$34 million dollars in support of the joint Federal Aviation Administration (FAA) and Aviation Industry's Statewide Plan. This plan has been developed by the Capstone Statewide Agreement Implementation Committee (AIC), which was formed with the signing of the Memorandum of Agreement between the FAA and the Aviation Industry representatives, in February 2007.

Under the AIC, the Safety Equipage Incentive Program (SEIP) has been designed by the Alaska Aviation representatives to provide sufficient financial assistance for the owners of approximately 4,000 Alaskan aircraft, (based on 90% of the reported flight hours) to equip with proper avionics for completion of the air-ground safety system.

For its part of the AIC Plan, the FAA has approved an investment in Alaska of approximately \$493 million for Capstone/Automatic Dependent Surveillance- Broadcast (ADS-B) infrastructure, out to Fiscal Year 2035.

The FAA recognizes the safety and access benefits this enhanced technology provides the air transportation community within the state of Alaska. The agency has committed to provide an investment of \$306 million for services in Anchorage, Bethel, Juneau, Fairbanks, Nome and Kotzebue. The remaining \$187 million that the FAA will invest is contingent upon the aviation industry's ability to equip with proper avionics.

In summary, the Alaska Aviation Community needs to obtain \$34 million for avionics equipage in order to secure the remaining \$187 million for the FAA to complete the statewide deployment of the ground infrastructure.

Your consideration and support in this matter would be greatly appreciated.

For more information please contact: Jere Hayslett, Surveillance and Broadcast Services Project Manager, Western Service Area at: (907) 271-5780.

Sincerely,

Hank Krakowski
Chief Operating Officer, Air Traffic Organization

cc: Mr. Robert Sturgell, Acting Administrator
Mr. Michael Cirillo, Alaska Regional Administrator
Ms. Megan Rosia, Assistant Administrator for Government and Industry Affairs

Federal FY	FAA Ground Infrastructure Deployment (Service Volumes)	Airport Upgrades to IFR (Weather and Communications)	Industry Safety Avionics Equipage
FY07- 09	Anchorage-Fairbanks Nome- Seward Peninsula Kotzebue-Northwest AK All of Southeast AK- Juneau area	Brevig Mountain White Mountain Elim Shaktoolik Noorvik	End of FY08 525 equipped or committed End of FY09 1,325 equipped or committed
FY08 - 10	Cook Inlet - Kodiak AK Penninsula Lake Clark - Bristol Bay	Larson Bay South Naknek Clarks Point	End of FY10 2,325 equipped or committed
FY09 - 11	Upper Yukon River Galena - Mid Yukon River - Koyuluck River North Slope	Central Koyuluk Hughes	End of FY11 3,325 equipped or committed
FY10 - 12	Prince William Sound - Gulf of Alaska AK Highway Copper River Isabel Pass McGrath-Upper Kuskokwim Yukon-Kuskokwim Delta (Airport Upgrades only)	Shageluk Quinhagak Kasigluk Kwethluk Napakiak	End of FY12 4091 equipped or committed

As stated previously, the FAA has committed to providing the deployment of the ground infrastructure and the airport upgrades as identified in the first Phase for FY07 - 09 believing that equipage will occur.

If Industry is not able to achieve the equipage or commitment for 1,325 aircraft by the end of FY09, the FAA will not be able to justify spending the additional funding for the remaining areas of Alaska or for the upgrade of airports for IFR capabilities as identified below the **red line**. Therefore, these areas may never receive services if this initial goal is not met. This equipage goal is the first real measurement for the FAA to move forward to the next Phase of Deployment scheduled for FY08 - 10.

As stated above, equipage or commitment for 2,325 is required to move to the third Phase for FY09 - 11 and so forth.

Also, if a specific area within the State of Alaska such as the North Slope decides to equip early, we, the FAA, will work with the Aviation Industry to possibly change the areas where we provide ADS-B/Capstone services.

Thanks for the opportunity to provide additional information.

Jere Hayslett
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Surveillance Broadcast Services, AJE-6
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